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Harri Okkonen

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

CHOW, CHIH CHING

ART UNIT

PAPER NUMBER

2191

NOTIFICATION DATE

DELIVERY MODE

06/25/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/807,694 | <b>Applicant(s)</b><br>OKKONEN ET AL. |  |
|                              | <b>Examiner</b><br>CHIH-CHING CHOW   | <b>Art Unit</b><br>2191               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is responsive to the Appeal Brief filed on March 23, 2009.
2. Claims 1-39 remain pending.

### Response to Arguments

3. Applicants' arguments for 35 USC § 103 rejections for Claims 1-39 have been fully considered respectfully by the examiner but they are not persuasive.
4. Applicants' arguments are basically in the following points:
  - 'Applicants respectfully submit that the above cited disclosure is silent with respect to the selection of an update agent. Further, Applicants respectfully submit that this portion does not remedy the previously discussed deficiencies, and does not disclose the presently claimed subject matter. Again, even if the update agent of Meyerson, *arguendo*, "corresponds" to a "single software program," the update agent of Meyerson is still not selected to correspond to a type of update information." (see Amended Appeal Brief dated March 23, 2009, page 12).

Examiner's Response: The examiner has cited a new prior art, "Abboud", for the 'selection' feature, please see 35 USC § 103 rejections below.

- "The Office Action provides no explanation of how or why an agent that requests information could somehow be invoked based upon an update currently being processed -- without the request from the agent of Meyerson, the update would not be processed, and the update agent of Meyerson could not be invoked based on an "update currently being processed" as claimed, as the

update in Meyerson would not be processed without the initial request from the agent.” (see Amended Appeal Brief dated March 23, 2009, page 13);

Examiner’s Response: Meyerson’s disclosure teaches that update can be implemented without the initial request from the agent, see Meyerson’s Abstract, “A method of updating computer software includes downloading software update information through a network, such as the Internet, to a user’s computer. The download is preferably done periodically and automatically.” Further see column 2 lines 36-38, “The software updates may then be downloaded and installed automatically, if previously authorized by the user”; also see column 6, lines 29-31, “It is expected, however, that most users will authorize automatic installation for the most critical updates and that this will be the default setting.” – no request or query will be needed, the update will be processed without an initial request from the agent.

- “For example, claim 1 also recites “a database in each of the plurality of electronic devices for accessing the plurality of provisioned update agents it. a corresponding electronic device.” Applicants respectfully submit that the cited art does not teach, suggest, or otherwise render obvious at least this aspect of claim 1 as well.” (see Amended Appeal Brief dated March 23, 2009, page 15);

Examiner’s Response: See Meyerson’s column 2 lines 36-38, “The software updates may then be downloaded and installed automatically,” – it’s inherent that Meyerson’s teaching has to have a database in each of the corresponding electronic devices in order to accommodate the downloaded and installed software updates.

### Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 7, 9-11, 17-19, 22, 24-27, 32, and 34-36 are rejected under 35 U.S.C. 103(a) as being obvious over US 2004/0031029 by **Lee** et al., hereinafter “Lee”, in view of prior art US Patent No. 6,636,958 by **Abboud** et al., hereinafter “Abboud”; further in view of US Patent No. 6,976,251, by **Meyerson**, hereinafter “Meyerson”.

As per **claim 1**, Lee discloses:

- *An electronic device network, the network comprising:*

*a plurality of servers;*

*a plurality of electronic devices communicatively coupled to at least one of the plurality of servers, each of the electronic devices being adapted to employ at least one of a plurality of update agents resident in the electronic device,*

Lee teaches a method for updating software on a plurality of networked devices.

See Lee’s Abstract, “A computer-implemented method for **updating a plurality of software components disposed on a plurality of networked devices**, the plurality of networked devices being interconnected in a computer network.”;

further see Lee’s paragraph [0009], “updating a plurality of software components

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disposed on a **plurality of networked devices**, the plurality of networked devices being interconnected if a computer network...the method further includes obtaining, using the **first local update agent** and the **first update parameters**, a **first update file for updating software in the first networked device**.

Additionally, the method includes updating, using the first local update agent and the first update file, **the software in the first networked device**.” And paragraph [0032], “Administrative console 104 is coupled via the network to a **plurality of networked devices such as servers 106, 108, and 110**.”

- *a database in each of the plurality of electronic devices for accessing the plurality of provisioned update agents in a corresponding electronic device.*

See Lee’s Abstract, “A computer-implemented method for **updating a plurality of software components disposed on a plurality of networked devices**, the plurality of networked devices being interconnected in a computer network. The method includes **ascertaining from a database** first update parameters associated with a first networked device of the plurality of networked devices.” And paragraph [0002], “it is possible to perform the software updating tasks manually for all the networked devices in the computer network. In a small business, for example, there is ideally a **binder or a database tracking information pertaining to all the networked devices** (*storing update provisioning information and associated information to locate the information stored in the database*) and the various hardware and software components installed thereon.”

However, Lee doesn’t disclose:

- *the update agent employed is selected*

Abboud discloses:

- *the update agent employed is selected*

Lee teaches updating software for network devices, but he does not mention ‘the update agent employed is selected’ specifically, however, Abboud teaches it in an analogous prior art, see Abboud’s Figure 6, and description in column 10, lines 19-33, “FIG. 6 illustrates an appliance server console or user interface 600 by **which a user/server personnel is able to initiate the automatic re-provisioning operation on the server.** As shown, user interface 600 includes **a display of available applications 601 and a selection of available options 603** to initiate various re-provisioning features executed via the re-provisioning utility. In order to **accept a request from a user** and perform a re-provisioning operation for the selected appliance server, the user interface 600 **accepts user input** (mouse-clicks, keyboard input, etc.) and **communicates the request to the console agent** of the **selected appliance server** (*selecting update agent*). The agent accepts the re-provision request, performs the necessary re-provisioning functions utilizing the re-provisioning utilities outlined above, and then messages the result back to the user.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee’s disclosure of the updating software for networked devices by allowing the user to select update agent taught by Abboud, for the purpose of allowing user/server personnel to initiate the automatic re-provisioning operation on the server. (Abboud column 10, lines 20-21)

However, Lee and Abboud don’t disclose:

- *the selected update agent is to correspond to a type of update information*

*received by the electronic device from the at least one of the plurality of servers, wherein the selected update agent processes the received update information to modify a first version of one of software and firmware in the electronic device to a second version, and wherein the electronic device is also adapted to provision the plurality of update agents with parameters and data used to facilitate update operations in the electronic device;*

But Meyerson discloses:

- *the selected update agent is to correspond to a type of update information received by the electronic device from the at least one of the plurality of servers, wherein the selected update agent processes the received update information to modify a first version of one of software and firmware in the electronic device to a second version, and wherein the electronic device is also adapted to provision the plurality of update agents with parameters and data used to facilitate update operations in the electronic device;*

See Meyerson's column 4, lines 38-50, "After the software update query is sent, the software update information is downloaded in block 14. In the simplest case, where **the update agent corresponds to a single software program**, the software update information may simply be a 'yes' or 'no' telling the agent whether a software update is available and whether a criticality check program is available. In the more general case, however, the software update information will include substantial additional information for multiple software programs. In the preferred implementation of the invention, the software update information will include a field telling the update agent whether a criticality check program is available for each software update." And Meyerson's column 4, lines 10-16, "it proceeds to block 12 where the intelligent update agent sends a software update query



comprising a request for software update information. The software update query is sent over a computer network, such as the Internet. In one implementation of the invention, the intelligent update agent is designed specifically for and may be incorporated into particular software.” For the ‘database’ feature, see Lee’s Abstract “The method includes ascertaining from a database first update parameters associated with a first networked device of the plurality of networked devices.”, therefore Lee’s teaching discloses the database feature.

***- a database in each of the plurality of electronic devices for accessing the plurality of provisioned update agents in a corresponding electronic device.***

Meyerson also teaches the database in electronic devices, see Meyerson’s column 2 lines 36-38, “The software updates may then be downloaded and installed automatically,” – it implies that Meyerson’s disclosure has to have a database in each of the corresponding electronic devices to accommodate the downloaded and installed software updates.

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee and Abboud’s disclosures of the updating software for networked devices by using corresponding update agent taught by Meyerson, for the purpose of routing the update request to a corresponding update agent for the specific software and/or hardware configuration of the user's computer. (Meyerson’s column 2, lines 30-35).

As per **claim 2**, the rejection of claim 1 is incorporated; and Lee further discloses:

***- The network according to claim 1, wherein the electronic device comprises random access memory and non-volatile memory, wherein the non-volatile memory comprises a plurality of components, the plurality of components***

*comprising at least one of the following: an update application loader, the plurality of update agents, firmware, an operating system (OS), and provisioned data, and wherein the provisioned data comprises update agent provisioning information and a number assignment module.*

See Lee's paragraph [0001], "These networked devices include, for example, routers, hubs, servers, workstations, desktop computers, laptop computers, printers, storage devices, printers and/or other output devices, and the like . As is well known, each of the networked devices may include many different hardware components each of which may be furnished with software (**such as system software, application software, firmware, driver, or the like**)" – OS, and provisioned data; further see Lee's Abstract, "The method further includes obtaining, using the first local **update agent** and the **first update parameters, a first update file for updating software** in the first networked device (a number assignment module and provisioning information for the update agent)".

As per **claim 3**,

*- The network according to claim 1, wherein the network comprises at least one of an update server, and a plurality of generators, wherein the generators are adapted to generate updates able to be processed by at least one provisioned update agent in the electronic device, and wherein the update server is adapted to store updates accessible by the plurality of servers.*

The rejection of claim 1 is incorporated; claim 3 is rejected for the same reason set forth in claim 1 and 2 rejections.

As per **claim 4**, the rejection of claim 1 is incorporated; and Lee further discloses:

*- The network according to claim 1, wherein the electronic device comprises a provisioned data unit adapted to store information related to an end-user's electronic device subscription, and wherein the provisioned data unit may be programmed during number assignment module programming activity.*

The rejection of claim 1 is incorporated; further see Lee's paragraph [0037], "Notification module 308 represents the module for collecting the status information and/or notification messages from the various components of the automatic software update system. The notification messages may be sent to administrator console 302 and/or may be employed to automatically trigger other steps." And description on paragraph [0039] (*programmed number assignment module for programming activity*).

As per **claim 7**,

*- The network according to claim 4, wherein each of the plurality of update agents has a corresponding entry in the provisioned data unit.*

The rejection of claim 4 is incorporated; for the corresponding entry in the provisioned data unit, see claim 1 rejection, wherein Meyerson's disclosure "the update agent corresponds to a single software program" teaches each update agent is corresponding to an entry in a corresponding software component.

As per **claim 9**, Abboud discloses:

- *The network according to claim 1, wherein the electronic device is adapted to display a list of available update agents to an end-user and solicit selection of an update agent to be used to update at least one of software and firmware.*

The rejection of claim 1 is incorporated; Lee, Abboud, and Meyerson teach updating network devices by update agent that corresponds to a type of update information, but they do not mention ‘the electronic device is adapted to display a list of available update agents to an end-user and solicit selection of an update agent to be used to update’ explicitly (Meyerson’s disclosure teaches this implicitly, see Meyerson’s column 6, lines 32-40, “In the preferred method of the invention the user sets a user criticality threshold in the user preference information. If the user criticality threshold were set to 8 it would allow automatic installation of software updates having an evaluated criticality of 8 or above and prevent automatic installation of less critical updates. Setting the threshold to above the maximum evaluated criticality rating of 10 would completely prevent automatic installation. Setting the user criticality threshold to 0 would automatically install all applicable updates.” -- user can set the criticality threshold of particular agent, so when user selects a certain software component to be updated, that implies the user is doing some kind of selection for an update agent.) However, Abboud teaches providing display for selection in an analogous prior art, see Abboud’s Figure 6, and description in column 10, lines 19-33, “FIG. 6 illustrates an appliance server console or user interface 600 by **which a user/server personnel is able to initiate the automatic re-provisioning operation on the server.** As shown, user interface 600 includes **a display of available applications 601 and a selection of available options 603** to initiate

various re-provisioning features executed via the re-provisioning utility. In order to **accept a request from a user** and perform a re-provisioning operation for the selected appliance server, the user interface 600 **accepts user input** (mouse-clicks, keyboard input, etc.) and **communicates the request to the console agent** of the **selected appliance server** (*selecting update agent*). The agent accepts the re-provision request, performs the necessary re-provisioning functions utilizing the re-provisioning utilities outlined above, and then messages the result back to the user.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee and Meyerson’s disclosures of the updating software for networked devices by allowing the user to select update agent taught by Abboud, for the purpose of allowing user/server personnel to initiate the automatic re-provisioning operation on the server. (Abboud column 10, lines 20-21).

As per **claim 10**,

- *The network according to claim 1, wherein the electronic device is adapted to invoke an update agent based upon an update currently being processed provided that the update agent is provisioned in the electronic device.*

The rejection of claim 1 is incorporated; claim 10 is rejected for the same reason forth in the rejection of claim 1.

As per **claim 11**, the rejection of claim 1 is incorporated; and Lee further discloses:

- *The network according to claim 1, wherein the electronic device may execute an update application loader on reboot, and wherein the update*

*application loader is adapted to invoke a boot initialization code before determining to update the electronic device.*

See Lee's paragraph [0023], "The local update agent then obtains the update file, performs the installation as required (**which may include rebooting the networked device** after installation)".

As per **claim 17**,

- *A method employing a plurality of update agents in an electronic device in an electronic device network, the method comprising:*

*communicatively coupling a plurality of electronic devices to at least one of a plurality of servers;*

*selecting at least one of a plurality of update agents resident in the electronic device to modify a first version of one of software and firmware in the electronic device to produce an updated version, wherein each of the plurality of update agents is arranged to process a corresponding type of update information received from the at least one of a plurality of servers; and*

*provisioning the plurality of update agents with parameters and data used to facilitate update operations in the electronic device, wherein a database is used for accessing the plurality of provisioned update agents.*

Claim 17 is a method version of claim 1, therefore is rejected for the same reasons set forth in the claim 1 rejection.

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As per **claim 18**,

- *The method according to claim 17, comprising generating updates able to be processed by at least one provisioned update agent in the electronic device and storing updates in an update server.*

The rejection of claim 17 is incorporated; claim 18 is rejected for the same reason set forth in the rejections of claim 1 and claim 3.

As per **claim 19**,

- *The method according to claim 17, comprising:  
storing information related to an end-user's electronic device subscription;  
and  
programming a provisioned data unit during number assignment module programming activity.*

The rejection of claim 17 is incorporated; claim 19 is rejected for the same reason set forth in claim 4 rejection.

As per **claim 22**,

- *The method according to claim 19, comprising providing each update agent an entry in a provisioned data unit.*

The rejection of claim 19 is incorporated; claim 22 is rejected for the same reason set forth claim 7 rejection.

As per **claim 24**,

- *The method according to claim 17, comprising:  
displaying a list of available update agents to an end-user; and*

*soliciting selection of an update agent to be used to update at least one of software and firmware.*

The rejection of claim 17 is incorporated; claim 24 is rejected for the same reason set forth in claim 9 rejection.

As per **claim 25**,

*- The method according to claim 17, comprising invoking an update agent based upon an update currently being processed provided that the update agent is provisioned in the electronic device.*

The rejection of claim 17 is incorporated; claim 25 is rejected for the same reason set forth in the claim 10 rejection.

As per **claim 26**,

*- The method according to claim 17, comprising executing an update application loader on reboot of the electronic device and invoking a boot initialization code before determining to update the electronic device.*

The rejection of claim 17 is incorporated; claim 26 is rejected for the same reason set forth in claim 11 rejection.

As per **claim 27**,

*- The method according to claim 17, comprising:  
storing update agent provisioning information in the electronic device; and  
hosting updates to be downloaded with update agents provisioned in the electronic device.*



The rejection of claim 17 is incorporated; claim 27 is rejected for the same reason set forth in claim 1 rejection.

As per **claim 32**,

- *An electronic device operable in an electronic device network, the electronic device comprising:*

*non-volatile memory comprising a first version of code;*

*communication circuitry for receiving, from at least one server in the electronic device network, update information having an associated type;*

*code resident in and executable by the electronic device, the code comprising a plurality of provisioned update agents selectable to cause processing of a corresponding type of received update information, to update a related code portion of the first version of code to an updated version, wherein a database in the electronic device enables accessing of the plurality of provisioned update agents;*

*wherein the processing modifies the related code portion of the first version of code to produce the updated version; and*

*wherein a provisioned update agent is selected to perform an update based upon the type of the received update information.*

Claim 32 is an electronic device operable in an electronic device network version of claim 1, therefore is rejected for the same reasons set forth in the claim 1, 2, and 3 rejections. For the ‘database’ and ‘selecting’ features see claim 1 rejection.

As per **claim 34**, the rejection of claim 32 is incorporated; and Lee further discloses:

- *The electronic device according to claim 32 wherein the update information comprises an update package.*

See Lee's paragraph [0009], "first update file for updating software in the first networked device", wherein an 'update file' is the same as an update package.

As per **claim 35**,

- *The electronic device according to claim 32 wherein a portion of the non-volatile memory comprises provisioned data received from at least one of the plurality of servers.*

The rejection of claim 32 is incorporated; claim 35 is rejected for the same reason set forth in claims 1, 2 rejections.

As per **claim 36**,

- *The electronic device according to claim 35 wherein the provisioned data comprises at least one entry corresponding to one of the plurality of provisioned update agents.*

The rejection of claim 35 is incorporated; for claim 36 'one entry corresponding to one agent' feature is rejected for the same reason set forth in claim 1 and claim 7 rejections – each software is designated to be updated by a certain agent.

8. Claims 5, 16, 20, 31, 33, and 37 are rejected under 35 U.S.C. 103(a) as being obvious over US 2004/0031029 by Lee et al., hereinafter "Lee", in view of prior art US Patent No. 6,636,958 by Abboud et al., hereinafter "Abboud"; further in

view of prior art of record, US Patent No. 6,976,251, by **Meyerson**, hereinafter “Meyerson”; and further in view of US 2003/0065738 by **Yang** et al., hereinafter “Yang”.

As per **claim 5**, the rejection of claim 4 is incorporated; Lee, Meyerson, Abboud don't disclose the “over-the-air service provisioning (OTASP) activity and over-the-air parameter administration (OTAPA) activity”.

However, Yang discloses:

*- The network according to claim 4, wherein the number assignment module programming activity comprises at least one of over-the-air service provisioning (OTASP) activity and over-the-air parameter administration (OTAPA) activity.*

Lee, Abboud, and Meyerson teach updating network devices by update agent that corresponds to a type of update information, but they do not mention ‘over-the-air service’ specifically, however, Yang teaching is for updating mobile node devices, see Yang’s Abstract “An apparatus, system and method are provided for **OTA downloading**, configuring and updating application programs stored in a memory of mobile communication device.”; and paragraph [0027], “Another aspect of the present invention discloses systems and methods for distributing application-based programs to **mobile devices over-the-air (OTA)** using Hyper Text Transfer Protocol (HTTP) and File Transfer Protocol (FTP).” Also for **over-the-air service provisioning** activity are disclosed in.

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee and Meyerson’s disclosures of the updating software for networked devices by using OTA taught by Yang, for the purpose of

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downloading to mobile device using wireless media (see Yang's paragraph [0051]).

As per **claim 16**, the rejection of claim 1 is incorporated; Yang further discloses:

*- The network according to claim 1, wherein the electronic device comprises at least one of a plurality of mobile electronic devices, and wherein the plurality of mobile electronic devices comprise at least one of the following: a mobile cellular phone handset, a personal digital assistant, a pager, an MP3 player, and a digital camera.*

For the cellular phone feature of claim 16 see Yang's paragraph [0054], "A gateway forms a connection or bridge between the WAN and some other type of network, such as an RF wireless network, **cellular network**, satellite network, or other synchronous or asynchronous land-line connection." – a mobile cellular phone handset must be included in a cellular network.

As per **claim 20**,

*- The method according to claim 19, wherein the number assignment module programming activity comprises at least one of the following: over-the-air service provisioning (OTASP) activity and over-the-air parameter administration (OTAPA) activity.*

The rejection of claim 19 is incorporated; claim 20 is rejected for the same reason set forth in claim 5 rejection.

As per **claim 31**,

- *The method according to claim 17, wherein the electronic device comprises at least one of the following: a plurality of mobile electronic devices, and wherein the plurality of mobile electronic devices comprise at least one of a mobile cellular phone handset, a personal digital assistant, a pager, an MP3 player, and a digital camera.*

The rejection of claim 17 is incorporated; claim 31 is rejected for the same reason set forth in claim 16 rejection.

As per **claim 33**,

- *The electronic device according to claim 32 wherein the communication circuitry comprises a cellular network interface.*

The rejection of claim 32 is incorporated; claim 33 is rejected for the same reason set forth in claim 5 rejection.

As per **claim 37**,

- *The electronic device according to claim 35 wherein programming of provisioned data is performed during programming of information related to a wireless service subscription.*

The rejection of claim 35 is incorporated; claim 37 is rejected for the same reason set forth in claim 5 rejection.

9. Claims 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0031029 by **Lee** et al., hereinafter “Lee”; in view of prior art US Patent No. 6,636,958 by **Abboud** et al., hereinafter “Abboud”; further in view of

prior art of record, US 6,976,251, by **Meyerson**, hereinafter “Meyerson”; and further in view of US Patent No. 5,708,776 by Dan **Kikinis** (hereinafter “Kikinis”).

As per **claim 8**, the rejection of claim 4 is incorporated; Lee, Meyerson, Abboud don't disclose the “Primary update agent and secondary update agent”.

However, Kikinis discloses:

- *The network according to claim 1, wherein one of the plurality of update agents is designated a primary update agent and another of the plurality of update agents is designated as a secondary update agent, and wherein the primary update agent is used to perform updates during one of power up and reboot of the electronic device and the secondary update agent is used to perform updates not requiring electronic device rebooting.*

The rejection of claim 35 is incorporated; Lee, Abboud, and Meyerson teach updating network devices by update agent that corresponds to a type of update information, but they do not mention ‘Primary update agent and secondary update agent’ specifically, however, Kikinis teaches it in an analogous prior art. All of their disclosures are for updating agents cross network and reboot of an electronic device. See Kikinis’ title, “Automatic recovery for network appliances” in particular, see Kikinis column 1, lines 53-59, “a **primary boot partition** on the mass storage device, comprising primary operating software and primary application software for execution by the CPU in **booting** the network appliance and placing it in operation performing its application; a **secondary boot partition** on the mass storage device, comprising secondary operating software and secondary application software; and an automatic recovery routine on the non-volatile storage device.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee and Meyerson's disclosures of the updating software for networked devices by using Primary Update/Secondary Update (while there are plurality of update agents) taught by Kikinis, for the purpose of initiating necessary reboot (Kikinis Abstract, line 3).

As per **claim 23**,

- *The method according to claim 17, comprising:*

*designating a primary update agent and a secondary update agent;*

*using the primary update agent to perform updates during one of the*

*following: power up and reboot of the electronic device; and*

*using the secondary update agent to perform updates not requiring electronic device rebooting.*

The rejection of claim 17 is incorporated; claim 23 is rejected for the same reason set forth in claim 8 rejection.

10. Claims 6, 12, 13, 15, 21, 28, 30, 38, and 39 are rejected under 35 U.S.C. 103(a) as being obvious over US 2004/0031029 by **Lee** et al., hereinafter "Lee", in view of prior art US Patent No. 6,636,958 by **Abboud** et al., hereinafter "Abboud"; further in view of prior art of record, US Patent No. 6,976,251, by **Meyerson**, hereinafter "Meyerson"; further in view of US Patent No. 6,249,817 by **Nakabayashi** et al., hereinafter "Nakabayashi".

As per **claim 6**, the rejection of claim 4 is incorporated; Lee discloses:

- *The network according to claim 4, wherein the provisioned data unit is adapted to store at least one of update agent related provisioning information, a universal resource locator of a server used to retrieve updates,*

See Lee's paragraph [0055], "In one embodiment, the update files(s) are stored on a shared storage device coupled to the network and are accessed by their path name(s), which may be received as part of the update parameters. In another embodiment, the update file(s) are **accessed by their URL (Uniform Resource Locator)**, which may be received as part of the update parameters and downloaded using the HTTP protocol".

However, Lee doesn't disclose 'security key'.

Nakabayashi discloses:

- *a security key used to authenticate server messages.*

See Nakabayashi's column 57, lines 12-17, "FIG. 55 shows the contents of agent data used in the third embodiment. In the table of FIG. 55, **the first column denotes the attributes of the database**, the second column the names, and the third column the meanings. In the first column, I represents creation of an **index** and P represent a **primary key**."

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee and Meyerson's disclosures of the updating software for networked devices by using index to the database for accessing the plurality of provisioned update agents by Nakabayashi, for the purpose of accessing specific data in database (Nakabayashi's column 3, lines 21-23).



As per **claim 12**,

*- The network according to claim 1, comprising update agent provisioning information stored in the electronic device, the update agent provisioning information comprising at least one of the following: a device server URL, an index to the database for accessing the plurality of provisioned update agents, a security key, and electronic device related information, wherein the device server URL provides references to servers hosting updates to be downloaded, and wherein the updates are compatible with update agents currently available and provisioned in the electronic device.*

The rejection of claim 1 is incorporated; Claim 12 is rejected for the same reason set forth in the rejection of claim 6.

As per **claim 13**,

*- The network according to claim 12, wherein the index to the database for accessing the plurality of provisioned update agents provides an index value used to compute an address location of a provisioned update agent, and wherein the index to the database for accessing the plurality of provisioned update agents provides an index to a table containing an address for an update agent in non-volatile memory the electronic device.*

The rejection of claim 12 is incorporated; Lee, Abboud, and Meyerson teach updating network devices by update agent that corresponds to a type of update information, but they do not mention ‘the index to the database for accessing the plurality of provisioned update agents’ specifically, however, Nakabayashi teaches

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it in an analogous prior art. See Nakabayashi's column 3, lines 19-23, "The data-update monitor server comprises: **storage means for storing the specific data** (*store data to data base*); access means for accessing the server based on information that represents an **address** of the **specific data** and is given by the client; (*index to the database*)"; also see Nakabayashi's column 15, lines 7-12, "In response to an user's instruction **for a selected service**, the access management unit 100 requires the selected service to the communications host, reads **folder list index** files corresponding to the selected service from the **database** 410, creates the list of folders FL included in the **selected service based on the folder list index files**, and displays the list of folders FL on the monitor 76."

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee and Meyerson's disclosures of the updating software for networked devices by using index to the database for accessing the plurality of provisioned update agents by Nakabayashi, for the purpose of accessing specific data in database (Nakabayashi's column 3, lines 21-23).

As per **claim 15**,

- *The network according to claim 1, wherein the database for accessing the plurality of provisioned update agents in the electronic device comprises an update agent table resident in non-volatile memory, the update agent table containing references to a plurality of update agents currently available and provisioned in the electronic device, the update agent table associating update agent names, update agent address locations, types of updates that the update agents are adapted to process, and provisioning status of the update agents for all available update agents in the electronic device.*

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The rejection of claim 1 is incorporated; for the update agents and update agent table see Nakabayashi's Figures 41, 41(a), 41(b) and 66, and description in column 50, lines 36-43, "FIG. 41, the data-update monitor server 1000 has two **user management tables** A, B and monitor URL data. An user ID and a password are stored in the user management table A as shown in FIG. 41(a). An user ID, a monitor URL of the user, attributes, and the date and time of latest access when the client accessed the Web server being monitored are stored in the user management table B as shown in FIG. 42(b)." wherein the USER ID can be the 'Agent ID', also see column 53, lines 28-36, "the **agent execution unit 702 carries out a predetermined agent among a plurality of agents previously registered.....** The new incoming information **database 706** stores new incoming information data (discussed later) as well as **agent data**".

As per **claim 21**,

- *The method according to claim 19, wherein the programming comprises storing update agent related provisioning information, a universal resource locator of a server used to retrieve updates, and a security key used to authenticate server messages.*

The rejection of claim 19 is incorporated; Claim 21 is rejected for the same reason set forth in claim 6 rejection.

As per **claim 28**,

- *The method according to claim 17, comprising determining an address location of a provisioned update agent via the database for accessing the*

***plurality of provisioned update agents, wherein determining comprises one of computing and accessing an entry in a table.***

The rejection of claim 17 is incorporated; Claim 28 is rejected for the same reason set forth in claim 13 and 15 rejections.

As per **claim 30**,

***- The method according to claim 17, comprising mapping at least one of the following: update agent names, update agent address locations, types of updates that the updates agents are adapted to process, and provisioning status of the update agents, for all available update agents in the electronic device.***

The rejection of claim 17 is incorporated; Claim 30 is rejected for the same reason set forth in the claim 15 rejection.

As per **claim 38**,

***- The electronic device according to claim 35 wherein provisioned data comprises a universal resource locator of a server on which a corresponding type of update information is stored.***

The rejection of claim 35 is incorporated; Claim 38 is rejected for the same reason set forth in claim 12 rejection.

As per **claim 39**,

***- The electronic device according to claim 35 wherein provisioned data comprises security information enabling update of the related code portion.***

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The rejection of claim 35 is incorporated; Claim 39 is rejected for the same reason set forth in claim 6 and 28 rejections.

11. Claims 14 and 29 are rejected under 35 U.S.C. 103(a) as being obvious over US 2004/0031029 by **Lee** et al., hereinafter “Lee”, in view of prior art US Patent No. 6,636,958 by **Abboud** et al., hereinafter “Abboud”; further in view of prior art of record, US Patent No. 6,976,251, by **Meyerson**, hereinafter “Meyerson”; and further in view of US Patent No. 6,249,817 by **Nakabayashi** et al., hereinafter “Nakabayashi”; further in view of US 2003/0065738 by **Yang** et al., hereinafter “Yang”.

As per **claim 14**,

*- The network according to claim 12, wherein the security key is used to authenticate updates during download of updates and during update activity, wherein a separate security key is employed to authenticate updates by a download agent and by the update agent, and wherein the security key is employed for at least one of the following: secure communication, encryption, and decryption of data and messages during communication with external systems*

The rejection of claim 12 is incorporated; for the security key feature of claim 14 see claim 6 rejection. Lee, Meyerson, and Nakabayashi teach updating network devices by update agent that corresponds to a type of update information and using a separate security key, but they do not mention ‘encryption and decryption’ specifically, however, Yang teaches it in an analogous prior art. See Yang’s

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paragraph [0076], “it may be preferable for information/data considered as confidential, **to encrypt the information** (not shown) when composing a short wireless message command string 540, 560. A received short wireless message that is **encrypted would then be decrypted** before continuing processing.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee, Meyerson, and Nakabayashi’s disclosures of the updating software for networked devices by using encryption and decryption of data taught by Yang, for the purpose of ensure information security (see Yang’s paragraph [0060]).

As per **claim 29**,

- *The method according to claim 17, comprising:*

*authenticating updates during download of the updates and during update activity, using a security key;*

*employing a separate security key to authenticate updates by a download agent and by the at least one of a plurality of update agents; and*

*employing the security key for at least one of the following: secure communication, encryption, and decryption of data and messages, during communication with external systems.*

The rejection of claim 17 is incorporated; Claim 29 is rejected for the same reason set forth in claim 6 and 14 rejections.

## Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Okkonen**, US 2004/0230965, discloses a method of managing services in electronic devices such as, for example, mobile handsets and their access to service providers via a service broker that is located on a server-side or in the device itself. An electronic device employing the service broker can manage the update of firmware/software, configuration, parameters etc. when a service needs to be provisioned, updated or changed.

**Cravo De Almeida et al.**, US 2003/0055931, discloses an agent obtains data from a device by receiving a plug-in containing system calls for obtaining the data from the device, loading the plug-in into the agent, obtaining the data from the device using the system calls, and transmitting the data over an external network using one or more of a plurality of protocols. The data is provided to a client by formatting the data, and making the formatted data accessible to a client via the external network.

**Huang et al.**, US Patent No. 6,553,375, discloses a novel management system for selectively distributing applications and databases from a server computer to a plurality of intermittently connected handheld devices. The applications and databases to be downloaded and deleted are first selected from an application list maintained by handheld devices.

**Reha et al.**, US Patent No. 6,282,709, discloses a method and apparatus for checking/updating existing software on a user's computer utilizes a graphical user interface (GUI). The GUI enables the user, without knowing what software exists on the computer, to download a text file from a remote server and check whether

the software on the remote server is contained on the user's computer. The user can also download and automatically install a new or updated program via the GUI.

**Walters** et al., US Patent No. 6,690,390, discloses a computer system and method for performing a task within an application from within an on-line help information display. Thus the on-line help information displayed by the computer system may include user selectable elements which enable the user to complete portions or all of a task directly from the on-line help window. The user may launch the application and then select on-line help information associated with performing a task within the application. In response to this user input, the computer may display on-line help information associated with the application. The displayed on-line help information may include various help information that specifies a recipe for performing the task, e.g., the information may guide the user through a series of steps to perform the task in the application.

**Moshir** et al., US Patent No. 6,990,660, discloses Methods, systems, and configured storage media are provided for discovering software updates, discovering if a given computer can use the software update, and then updating the computers with the software as needed automatically across a network without storing the updates on an intermediate machine within the network.

**Humpleman** et al., US Patent No. 6,546,419, discloses Method and system for performing a service on a home network having a plurality of home devices connected thereto, by: connecting a client device to the home network for displaying a user interface; executing a software agent on the client device for obtaining selection information for the network devices and displaying the selection information on a user interface displayed on the client device; selecting a



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first home device connected to the network from the user interface being displayed on the client device; reading first capabilities data for the first home device, where the first capabilities data includes information in a structured format for identifying the capabilities of the first home device; reading second capabilities data for a second home device connected to the network, where the second capabilities data includes information in the structured format for identifying the capabilities of the second home device; comparing the first and second capabilities data of the first and second home devices, respectively; selecting the second home device from the user interface displayed on the client device; and sending control and command data from the client device to the first and second home devices to cause the first and second home devices to communicate with each other to perform the service.

13. The following summarizes the status of the claims:

35 USC § 103 rejection: Claims 1-39

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature of relating to the status of this application should be directed to the **TC2100 Group receptionist: 571-272-2100**.

Information regarding the status of an application may be obtained from the

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Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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